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(21)Application number : 11-292932 (71)Applicant : HITACHI METALS LTD

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## (54) R-T-B SINTERED PERMANENT MAGNET

### (57)Abstract:

PROBLEM TO BE SOLVED: To provide an R-T-B sintered type permanent magnet of high performance which is suitable for a use requiring high Br and high (BH)<sub>max</sub>.

SOLUTION: This R-T-B sintered type permanent magnet (R is at least one kind of rare earth element containing Y and necessarily contains at least one kind of heavy rare earth element selected from among a group composed of Dy, Tb and Ho, and T is Fe or Fe and Co) has a composition, where R: 28-33 wt.%, B: 0.5-2 wt.% and residue is practically composed of T and unavoidable impurities. The R-T-B sintered type permanent magnet has a texture containing first R<sub>2</sub>T<sub>14</sub>B type main phase crystal grains, where the concentration of heavy rare earth element is higher than these of

crystal grain phase and second R2T14B type main phase crystal grains, where the concentration of the heavy rare earth element is lower than that in the crystal grain phase.

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